

FIG. 1

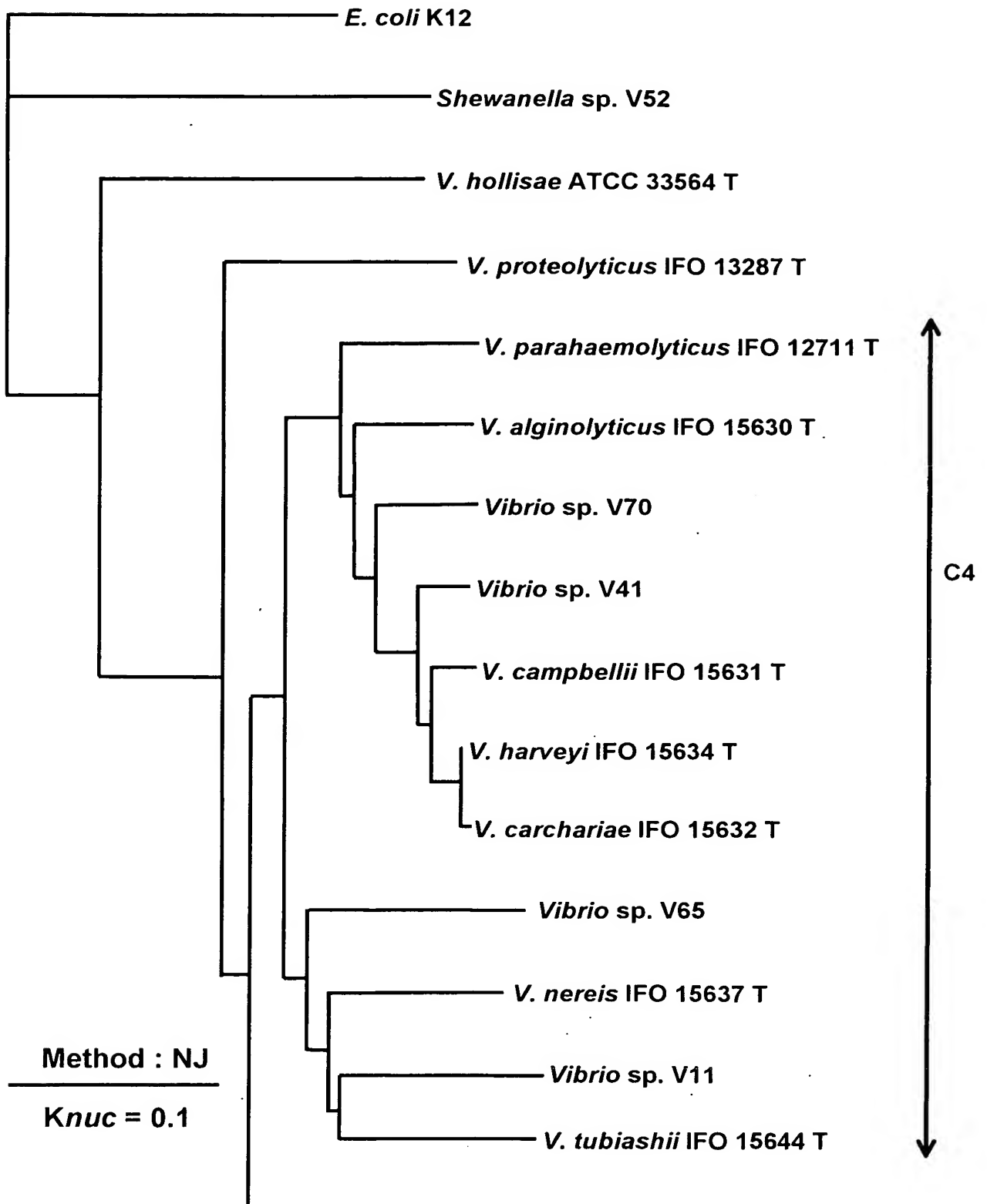


FIG. 1

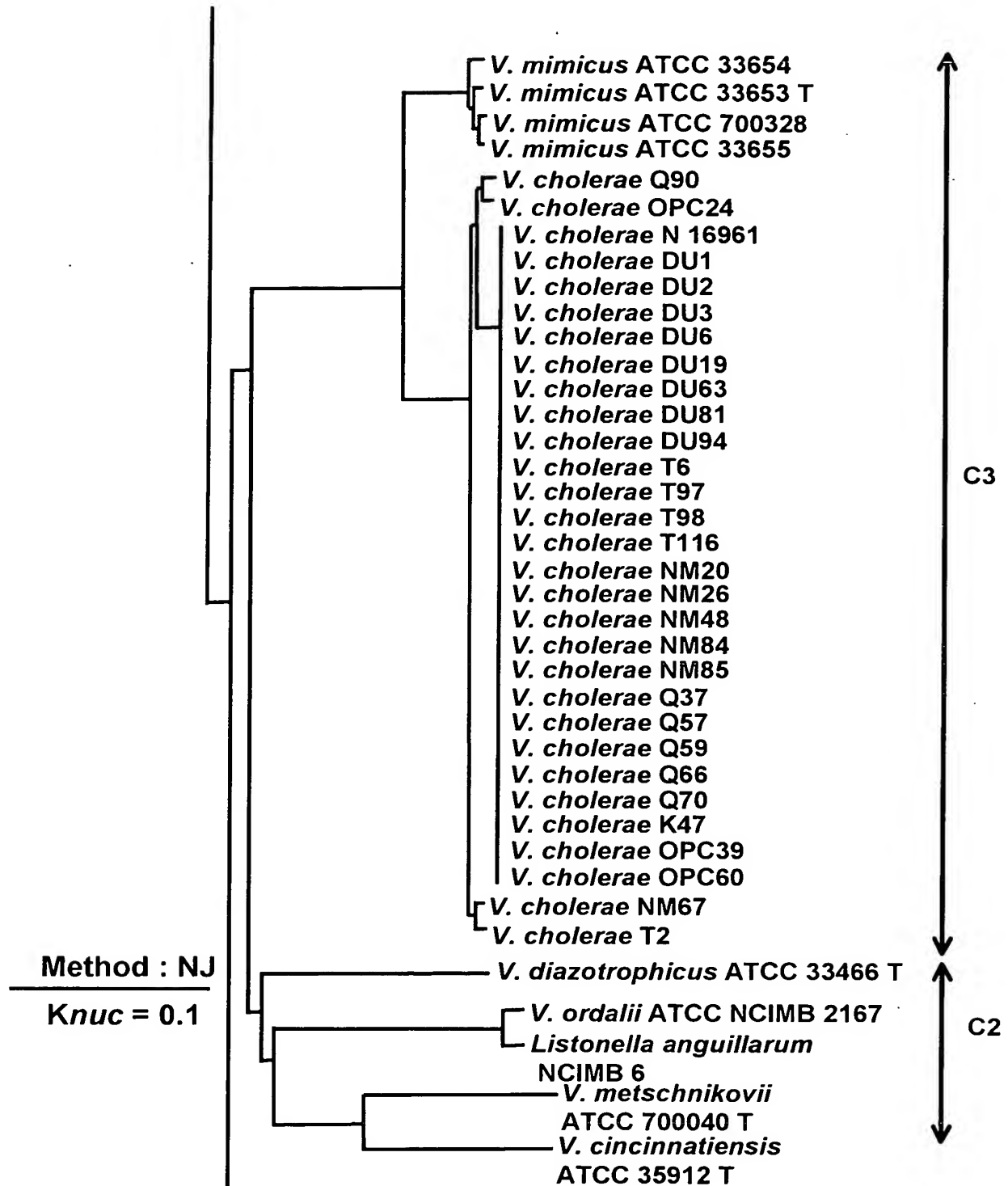


FIG. 1

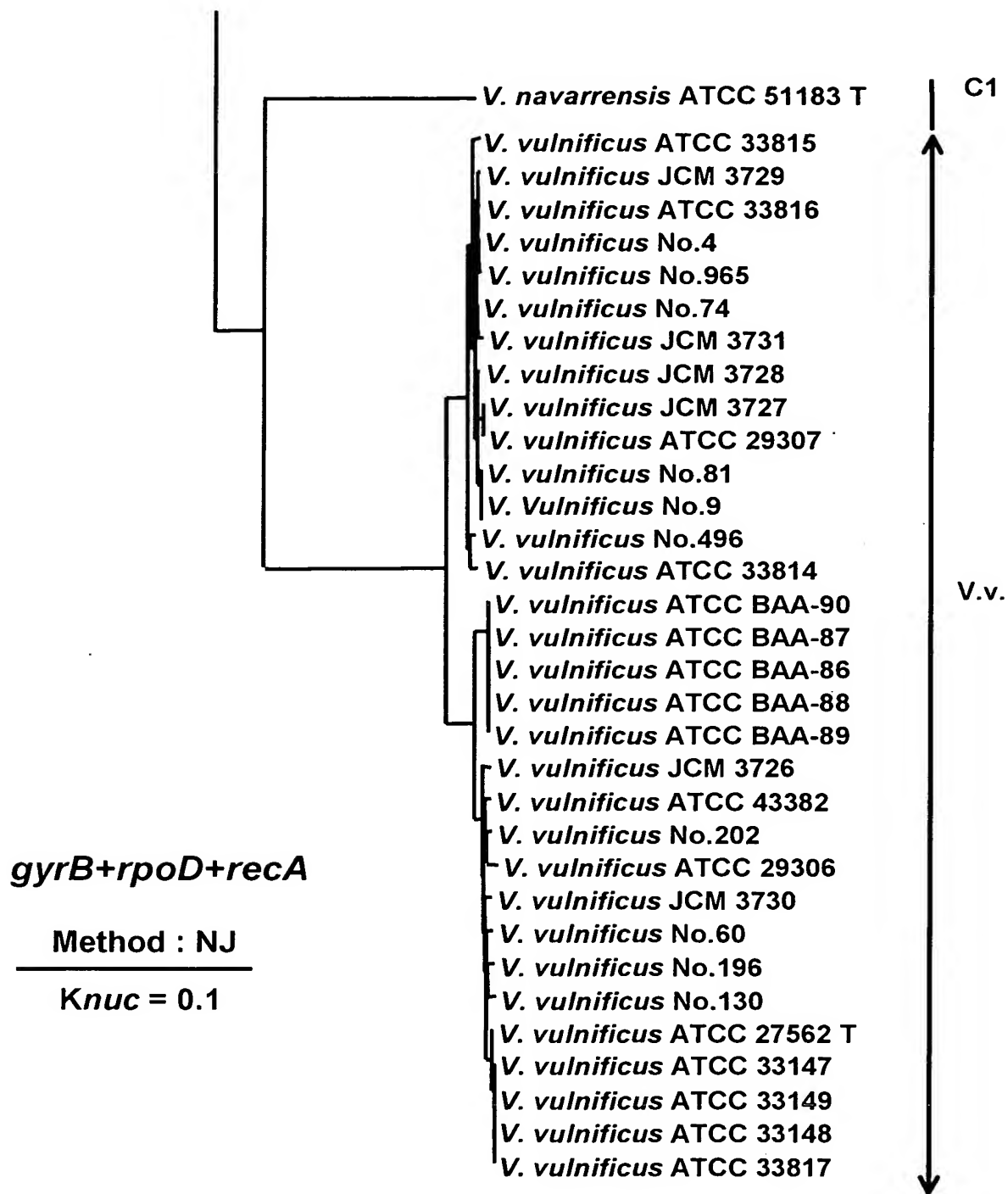


FIG. 2

gyrB-VV.con	1	GTGCTGGCGGCTCTTACAGGTGTWGGYGTTCGGTGGTAAACGAYTGCTGAAAAAGTR	60
2,3,4gyrB.con	1	.H..N..Y..YY.R..Y..B..N..K..K..N..N..B..Y..V..N..W.....D	60
		** ** ** ** * ** ** ** **	
gyrB-VV.con	61	CTRYTKACGATTCATCGTGGTGGTCATACYCAAGCCAAACCTATCGTCATGGTGTGCCT	120
2,3,4gyrB.con	61	YWD..N..Y..YY.Y..YRRY..HVMN.YB...WCN.....B..YRY..Y..B..D..D	120
		** ** ** ** * ** * **	
gyrB-VV.con	121	GATGCACCGCTTGCTATCATCGGYGATACYGAAAAAACCGGTACCACGGTACGTTCTGG	180
2,3,4gyrB.con	121	C.A.YN..VY.RDSBG.DG.N..W..D..N..DMRH..H..D..H..VB.D..Y..Y...	180
		* * * * *	
gyrB-VV.con	181	CCAAGTGCKSAAACCTTCASCAACATCGAATTTCATTATGACATCCTAGCGAAGCGTYTA	240
2,3,4gyrB.con	181	.D..Y..H..V..B..Y.C...Y..Y.....Y..Y..Y..H..YY.N..T..R..Y..R	240
		** ** ** ** * ** * **	
gyrB-VV.con	241	CGTGAGCTCTCTTCTGAACTCKGGCGTGCTKATCAAACTGTTTGATGAGCGCGAAGAA	300
2,3,4gyrB.con	241	.Y..R..B..W...Y.R..Y..W..B..N..V..YMRDY.RHNN..Y..R..H....MR	300
		** ** ** ** * ** * **	
gyrB-VV.con	301	GATAAGRAAGATCACTTCATGTATGAAGGTGGTATTCAGCGTGYTYACTCACTTGAAC	360
2,3,4gyrB.con	301	.Y..RM.M..Y..Y..Y.KR..Y.....K..K..YMR...R....KRSY..YY.N..Y	360
		** ** * ** ** * **	
gyrB-VV.con	361	CGCAACAARACMCCCATCCATGAAAAAGTATTCATTTAAKYCAGCGTGAAGACGGK	420
2,3,4gyrB.con	361	.Y..Y..A..B..V..Y.....V.....V.....Y....R.HMW..V.....M..Y..B	420
		** ** ** ** * ** * **	
gyrB-VV.con	421	ATTGCKGTTGAAGTGGCGATGCAGTGGAAACGATGGYTTCCAGAAAAACATCTACTGTTT	480
2,3,4gyrB.con	421	.YYWSB..K.....V..V.....R.....Y..Y.....RRY..Y.....Y...	480
		* ** ** ** **	

FIG. 2

gyrB-VV.con	481	ACCAACAACATCCACAGCGTGAYGGTGGTACCCACTAGCGGGTTCCGYGCGGCATG	540
2,3,4gyrB.con	481	.Y.Y.Y.Y.D.R.Y.T.B.DR.H.Y.R.B.D.....SN..VY.R	540
		** ** ** ** **	
gyrB-VV.con	541	ACGGGCACAYTGAACAGCTACATGGACAAAGAGGYTACTCRAAGAAAGCGAAACCGCG	600
2,3,4gyrB.con	541	.B..H..B..N..Y.M..WY....H..R....S.WYWSS..R....SM..R.VK.R	600
		** ** ** ** * * *	
gyrB-VV.con	601	ACTTCTGGYGAYGATGCGCGTGAAAGTTTGACYGCWGTGTTTCAGTHAAAGTRCCGGAT	660
2,3,4gyrB.con	601	.V..K.....K.....Y..R..N..N..B..N..D..B.....D..D...	660
		** ** ** * * *	
gyrB-VV.con	661	CCAAAATTCTCAAGCCAAACAAAGACAAACTGGTTTCTAGYGAAGTRAAGTCCGCAGTG	720
2,3,4gyrB.con	661	.W..R....N.....Y..RY.R..B..WTCB..R....RD.N..R..K	720
		** ** ** * * *	
gyrB-VV.con	721	GAATCCTTTCATGGCAGACAACTGAACGACTTCTTRGCGYARCACCCCAAGCGAAGCGAAA	780
2,3,4gyrB.con	721	.R..DGCN...RRY..R..RY.BRMN..B..YY....N...M.Y..HWSY.....N...	780
		** ** ** * * *	
gyrB-VV.con	781	ACCGTTTGTCTAAGATTATCGACGCGCGACGCGTGCGGTGAAGCAGCRCGTAAAGCGCGT	840
2,3,4gyrB.con	781	MHV..B...WSN..R..Y..Y..T..V..D..H..N..Y.....V..V.....N..B	840
		** ** ** * * *	
gyrB-VV.con	841	GAAATGACRCGCCGTAAAGGGCGRTTAGAYCTTGCTGGCCTCCW	885
2,3,4gyrB.con	841	.R....N..Y.....B...Y.V...Y.NR.W..YY.D..N	885
		** ** ** * * *	

FIG.3

rpoD-VV.con	1	ACTCGTGAAGCGGAAATCGACATCGCTAAMCGAATTGAAGATGGTATCAACCAAGTACAG	60
2,3,4rpoD.con	1	..W..Y.....Y..R..Y..T..Y..B..R..Y..Y.....W.....Y.....W..A	60
		** ** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ***** ***** **	
rpoD-VV.con	61	TCSTCTGTGTGAATACCCAGGAACCATTCCTTATATCTKGAACAGTTCGACAAAGTA	120
2,3,4rpoD.con	61	HSYK.NR.K..Y..R..Y..H..H..N..Y..W..Y..Y..W..R..R..Y..YMRD..K	120
		* *	
rpoD-VV.con	121	CAAGCGGAAGAACTTCGCCTMACTGATCTTATCAGTGGTTTGTGATCCAAATGCAGAT	180
2,3,4rpoD.con	121	.WD..H..R..RY.W..YY.V..H..YM.N..YWSH..Y..YR.H..Y..DR.YKMHWRB	180
		* *	
rpoD-VV.con	181	GAAACGGCWGCTCCAACCGCAACACACATYGGTTCAGAGCTGCAGAAATCTGATTGGAA	240
2,3,4rpoD.con	181	.V.RSNRMN..N.....N..D..N..Y..C..Y..W..RY..ND.HRRNK.N..YC.N.MD	240
		* *	
rpoD-VV.con	241	GATGAAGACAAYACCGACATCGACGATGAAGACGAAAGAYNNNNNNGAAGATGGCGAT---	297
2,3,4rpoD.con	241	..Y..M..YRR.RMN.WYVMB..NSWY.....Y..D...GAVGAY.RM..YR.Y..HRRY	300
		** ** ** * * * * * * * * * * * * * * * * * *	
rpoD-VV.con	298	TCAAGCAGYGATTACAGAGGAMGATGTCGGCATCGACCCCTGAAATGGCGCTAGAGAAGTTY	357
2,3,4rpoD.con	301	DVMRVYDVHRRYDVY..W..A..DRYN..H..Y..Y.....RS.B..DYKW..R..A...	360
		** ** ** * * * * * * * * * * * * * * * * * *	
rpoD-VV.con	358	ACTCARCTTCGTAACAGCTAYCAGAAATCTGCAACTTGCCCKTRAATGAACATGGTCGAGAG	417
2,3,4rpoD.con	361	.MYS..Y.D..YRRYMRV.W...RR.YB.D..RY.H..KRWH..Y..RYWY..YNRYR.N	420
		* *	

FIG. 3

rpoD-VV.con	418	AGTGTCAAACAGCTCAAGCCCATGAACATGATGCTCGATGTGTTAAAGAGTTTCGTCTA	477
2,3,4rpoD.con	421	..YNMHMTRRYHBMNS...NHMRRVB.DR.RY.VRMDR.H..CMRH..R..Y..HY.V	480
		**** * * * * *	
rpoD-VV.con	478	ACDCCGAAGCAGTTTGACCATTTGGTTAACGAACCTCGCACCGCYATGGATCGCGTTCGT	537
2,3,4rpoD.con	481	..R..D..R..R..Y..YY.YY.N..HRMHRMD..DM.Y.MHK.D....W..Y..D..Y	540
		** ** ** ** ** * * * * *	
rpoD-VV.con	538	ACKCAAGARCGYTTGATCATGAARTCTGCGGTAGAAATCGCSAARATGCCRAAGAARTCK	597
2,3,4rpoD.con	541	..H.....Y..R.V..MRVD.N.YD..Y...DWM.SB.....D..R.....R	600
		** ***** ** * * * * *	
rpoD-VV.con	598	TTYATYGCWCTCTTYACTGGCAACGARTCWARCGAAGAAATGGTTAGATMAGATCCTMGYY	657
2,3,4rpoD.con	601	.....K.NB.V.....H..Y..Y.....NR.Y..N.MD...Y.N..YV.RR.NM.Y.CD	660
		***** * * ***** ** * * * * *	
rpoD-VV.con	658	TCTGAYAAGCCRTACGYAGAAAAGATYAARCTKCACGAAGAAGACATTCGTCGTTCAATC	717
2,3,4rpoD.con	661	W.H..H..R..W..Y..WSMV..RR.HMGHSMV.H....VRHB..Y..Y..Y..W..Y	720
		* ** ** ** ** * * * * *	
rpoD-VV.con	718	DCCAAGCTAAGACCAATTGAAGAAGAAACGTCGCTTTCAGTRRACACATCAAAGACATC	777
2,3,4rpoD.con	721	SMN..RY.DMRDRYB..Y..RS.R..R..N..WY.NDMK..DV.NMRY..Y.....Y..Y	780
		** * ** ** * * * * *	
rpoD-VV.con	778	AGCCGTCGTATGTCTATMGGTGAAGCMAAAGCTGCCCGTGCG	819
2,3,4rpoD.con	781	....Y..Y.....W..Y.....R..D....W..Y..D...	822
		***** ** ***** ** ***** ** *****	

FIG. 4

recA-VV.con	1	CCAATGGCCGTCGTTGAAATTTTGGTCCAGAATCTTCAGGTAACACCGTTGACC	60
2,3,4recA.con	1	.R....D.D..Y.N..RR.B.WY..Y.W....D.V..W....N..VY.R..N	60
		** ***** ** ** ** **	
recA-VV.con	61	CTTGAGCTGATCGCTGCRGCTCAACGTGAAGGCAAACTTGTGCGTTATCGATGCGAG	120
2,3,4recA.con	61	.K..RY.R..Y..NK.W..R..R..H.WR..Y....B....B..Y..Y....N..R	120
		** ** * ** ** * ** ** * ** ***** ** ** ***** **	
recA-VV.con	121	CACGCGTTRGATCCTGTGTATGCGAAGAACCTTGGCGTWAATATCGACCACTTTRTTGGTA	180
2,3,4recA.con	121	.Y..NY.N..Y..NR.Y..Y..BMRV...Y.S..B..B..B..YR.YS.DC.VY.B..B	180
		** ** * ** ** * ** ** * ** ***** ** ** * * * * *	
recA-VV.con	181	TCTCAGCCYGAYACBGGTGAACAAGCRTTGGAAATCTGTGATGCKCTTGCTCGCTCAGGK	240
2,3,4recA.con	181	.W..R..W.....Y..R.....C.D.....H.....Y..NY.R..N..Y..T...	240
		** ** * ** ***** ** ***** * ***** ** ** * ** * ** *	
recA-VV.con	241	GCGGTTGAYGTTATTGTTGTCGAYTCTGCTGCMGCATTGACRCCAAAGGCAGAAATYGAA	300
2,3,4recA.con	241	.NR.N....B..B..BR.Y....N..N..D..NY.R....R..A..N..R.....	300
		** * ***** ** ** * ***** ** ** * ***** ** ** *****	
recA-VV.con	301	GGTGAGATGGGYGAYTCGCACATGGGTCNCAAGCTCGTATGCTMTCTCAAGCGATGCGT	360
2,3,4recA.con	301	.B..R.....WSS..Y....B....R..D.....Y.B..B.....R.....	360
		** ** ***** ** ***** ** ***** ** ***** ** *****	



FIG. 4

recA-VV.con	361	AAGYTAACGGGKAACCTAAARCAAGTCTAACTGTATGTGTATCTTCATYAACCAGATYCGT	420
2,3,4recA.con	361	..R..V..K..Y...Y.N....R..N..Y..Y....Y..Y.....R.....K	420
		** ** ** ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** *	
recA-VV.con	421	ATGAAGATYGGKGTGATGTTTGGTAAYCCAGAAACCACACRGGTGGTAACGCWCTGAAA	480
2,3,4recA.con	421	....R....T.....Y..Y..C..W..R..H..M..N..Y....Y..N..D..R	480
		***** ***** * ** * ** * ** *	
recA-VV.con	481	TTCTACGCTTCTGTWCGTCTTGATATTCCGCCGTACTGGTGCRCATCAAAGAAGGYGATGAG	540
2,3,4recA.con	481	..Y..Y....D....YY.D....Y..Y....D..BK.D..Y....R..H..H..A	540
		** ** ***** * ** ** * ** ** * ** * ** * ** * ** * ** *	
recA-VV.con	541	GTMGTTGGTAAYGAAACGCGYATCAAAGTGGTGAAGAATAAGATCGCTGCCCGTTTAAA	600
2,3,4recA.con	541	..B..N..B.....N.....Y..R..N..K..R..Y..R..Y..N..N..V.....R	600
		** ** ** ***** ***** ** ** ** * ** * ** * ** * ** * ** *	
recA-VV.con	601	GAAGCCAAYACYCAAATTATGTAYGGCCARGGCWTTAACCGYGAAGGY	648
2,3,4recA.con	601	S.R..BR....B..R..YM.K.....H..A..BT.Y..Y.....R..T	648
		* ** ***** ** ** * ** * ** * ** * ** * ** * ** *	